

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

PACIFIC INDEMNITY COMPANY)

15 Mountain View Road)

Warren, NJ 07061-1615)

Plaintiff,)

C.A. No.: 04-11975-RWZ

v.)

ALFRED KEMP, Individually and d/b/a)

KEMP PLUMBING)

P.O. Box 1322)

Pembroke, MA 02359)

and)

MARTIN SANDBORG, Individually and d/b/a)

SANDBORG PLUMBING AND HEATING)

13 Liberty Street)

Sandwich, MA 02563,)

Defendants.)

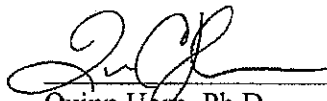
**AFFIDAVIT OF QUINN HORN IN SUPPORT OF DEFENDANT ALFRED
KEMP D/B/A KEMP PLUMBING'S OPPOSITION TO PLAINTIFF'S MOTION
TO EXCLUDE TESTIMONY OF DEFENDANT KEMP'S EXPERT QUINN
HORN UNDER RULE 702 OF THE F.R.E.**

I, Quinn Horn, do hereby state under oath:

1. I am a resident of the Commonwealth of Massachusetts.
2. I have a Ph.D. in Metallurgical and Materials Engineering from the Michigan Technological University.
3. Attached hereto as Ex. A is a true and accurate copy of my curriculum vitae setting forth my experience, education and training.
4. Attached hereto as Ex. B is a true and accurate copy of my report in this case dated March 7, 2006.

5. It is well-known in the field of metallurgy that the surfaces of machined leaded- brass plumbing components are covered with lead as a result of the machining process. In fact, lead is added to the brass to improve the machinability of it precisely because the lead acts as lubricant along the surface of the brass.
6. Attached hereto as Ex. C are two peer-reviewed scholarly articles that support this proposition:
 - a.) A.W. Potts et al., Applied Surface Science 59, 63-67, 1992
 - b.) J. X. Wu et al., Surface and Interface Analysis, 22, 323-326, 1994
7. The concept that a pre-existing lead-tin interface will begin to melt at the eutectic temperature as described in my report is a basic metallurgical phenomenon that is taught in sophomore-level metallurgy programs at accredited universities.
8. The microscopic and chemical analysis conducted by me in connection with my work in this matter, and as described in my report, shows that the brass fittings contained lead and that the lead was present at the surface of separation.
9. Plaintiff's expert, Thomas Eagar, did not attend the microscopic and chemical analysis of the evidence in this case.
10. The methods I used in rendering my opinion in this case are generally accepted in the field of metallurgy. My opinion is consistent with generally accepted principles of metallurgy.

SIGNED UNDER THE PAINS AND PENALTIES OF PERJURY THIS 27TH DAY OF FEBRUARY, 2007.



Quinn Horn, Ph.D.
Exponent, Inc.
21 Strathmore Road
Natick, MA 01760